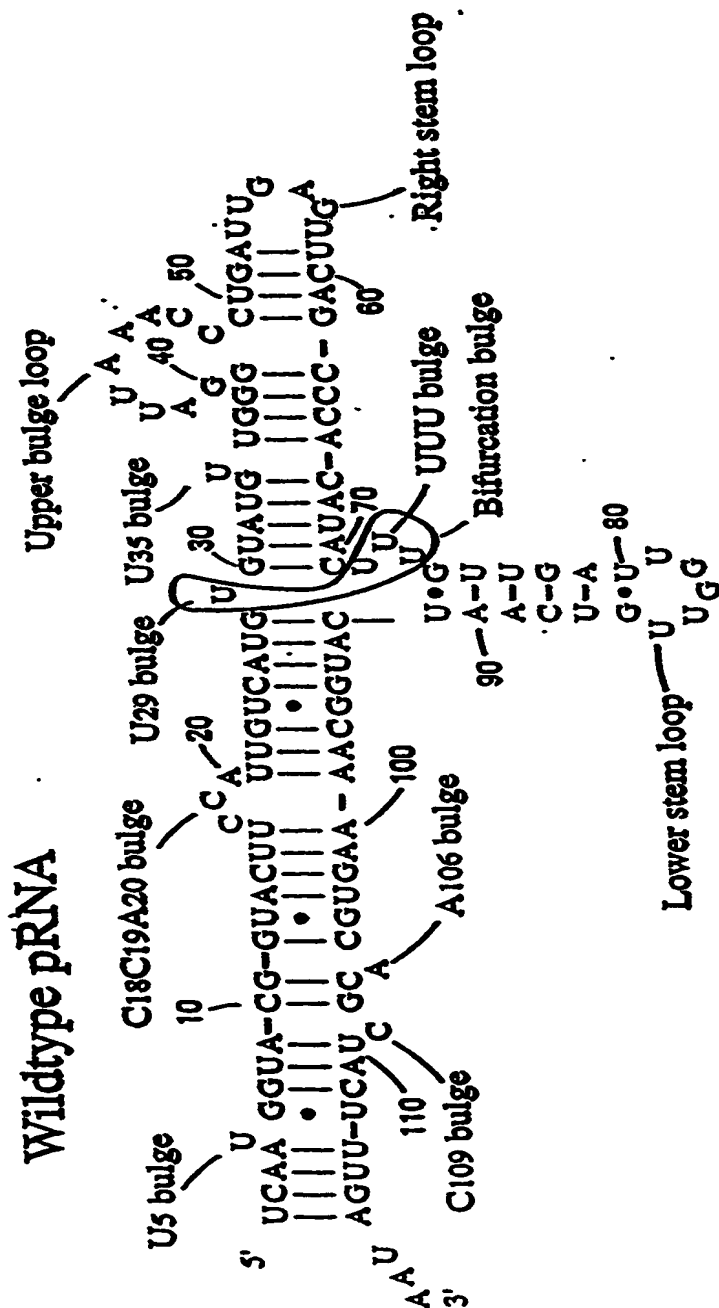
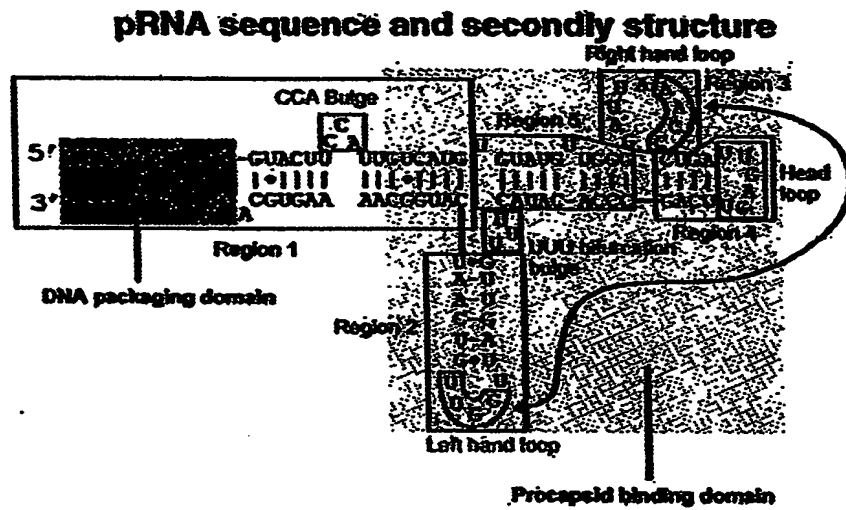


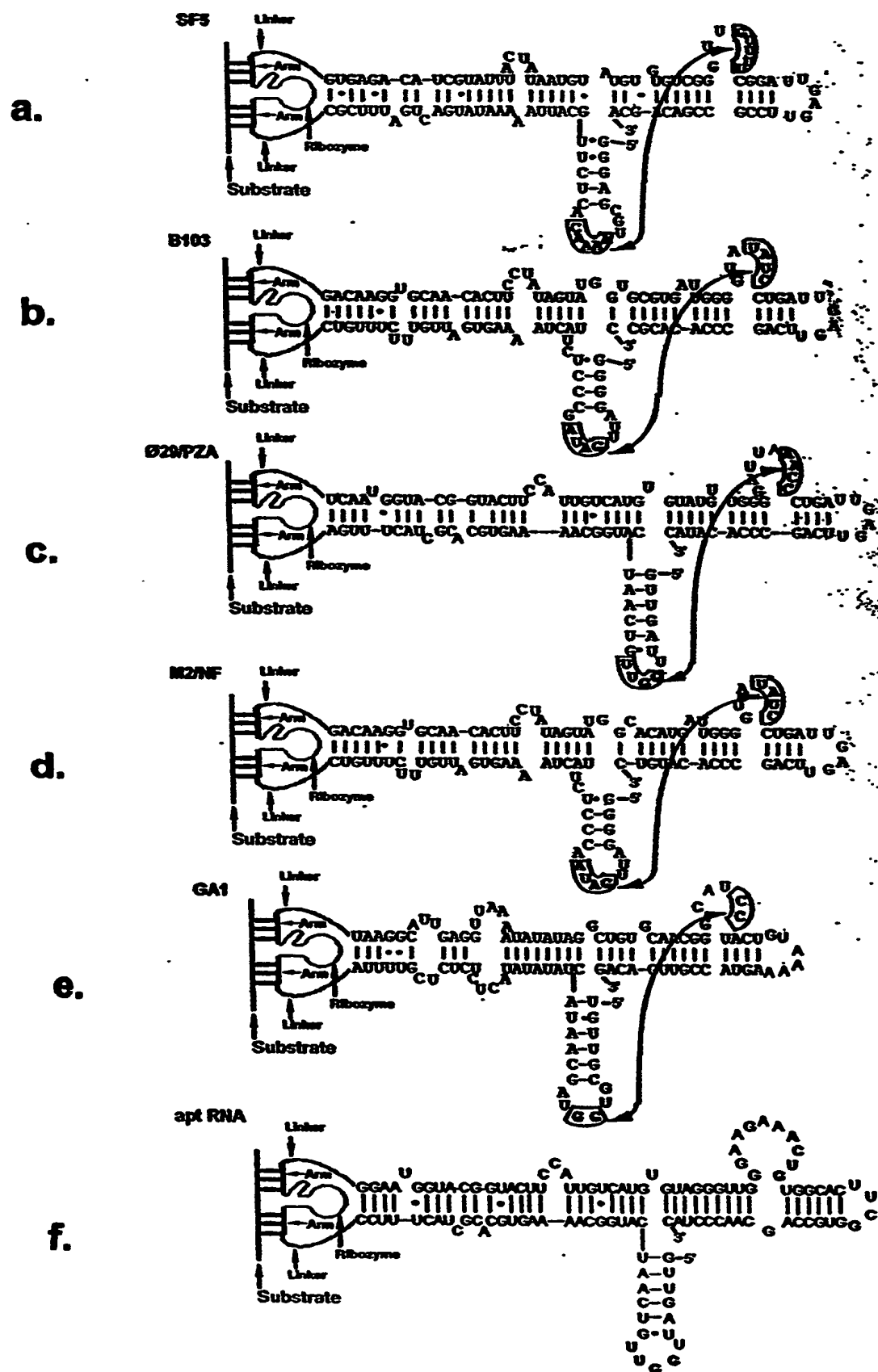
Fig. 1



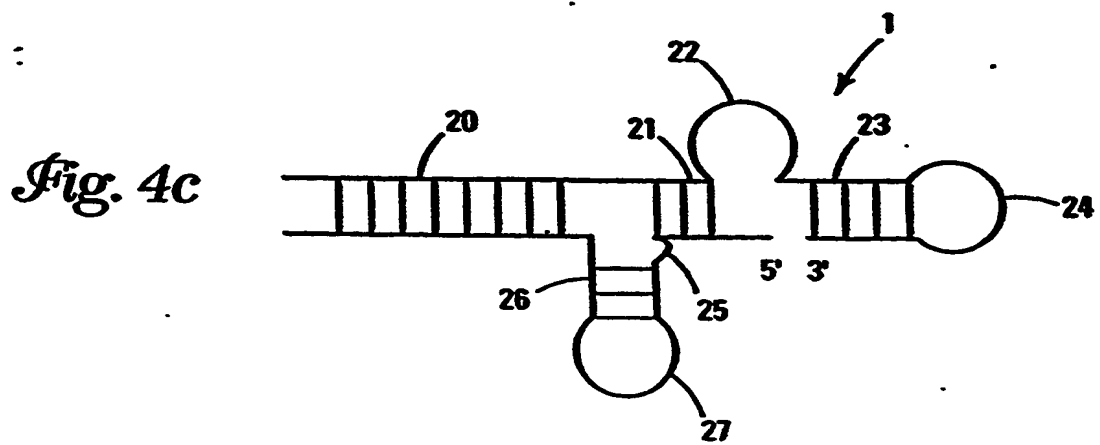
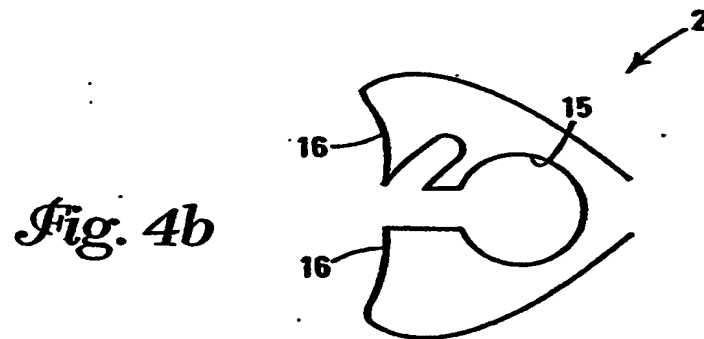
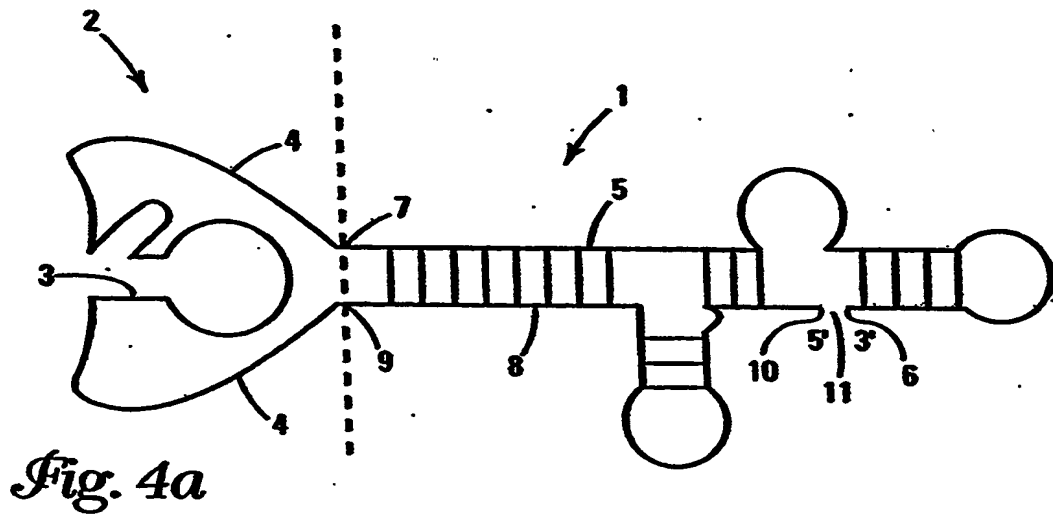
**Fig. 2(a)**



**Fig. 2(b)**



**Fig. 3**



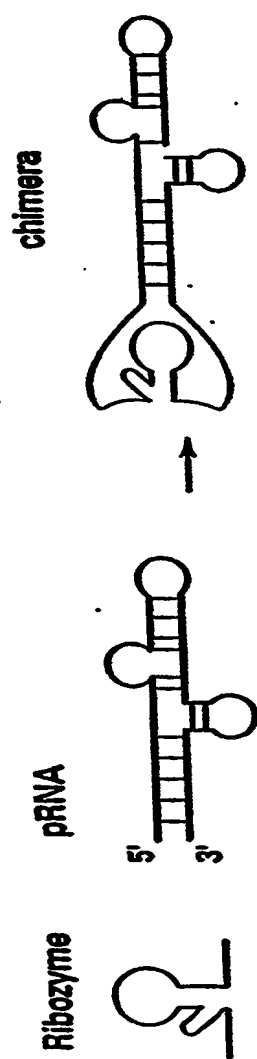
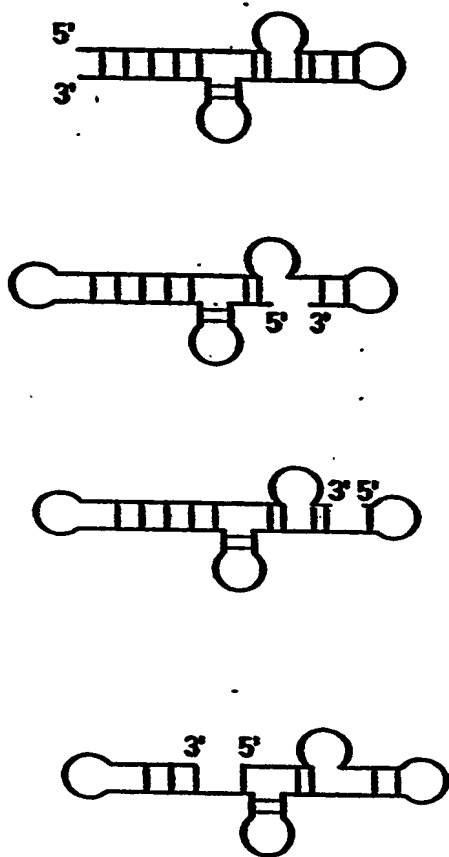
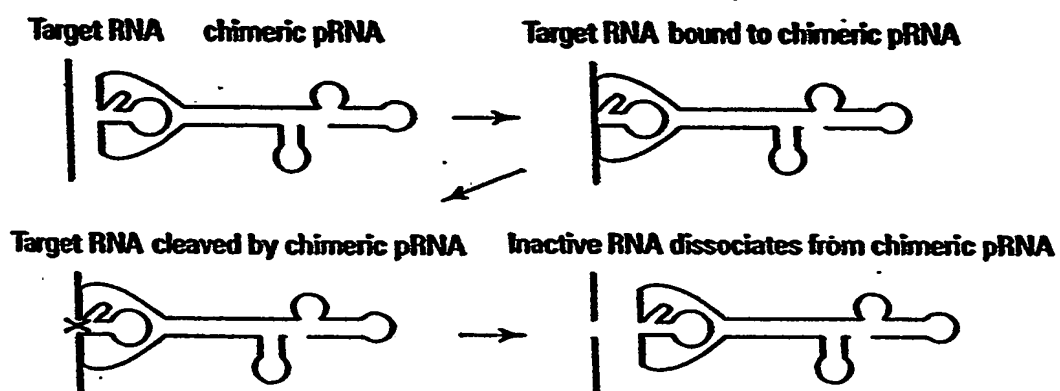
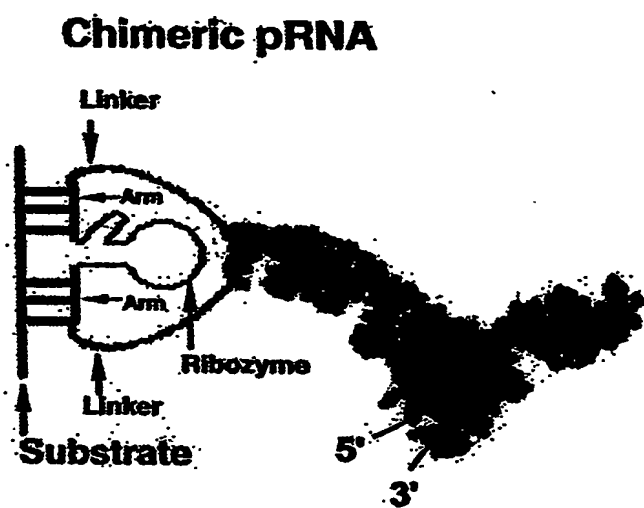


Fig. 5a

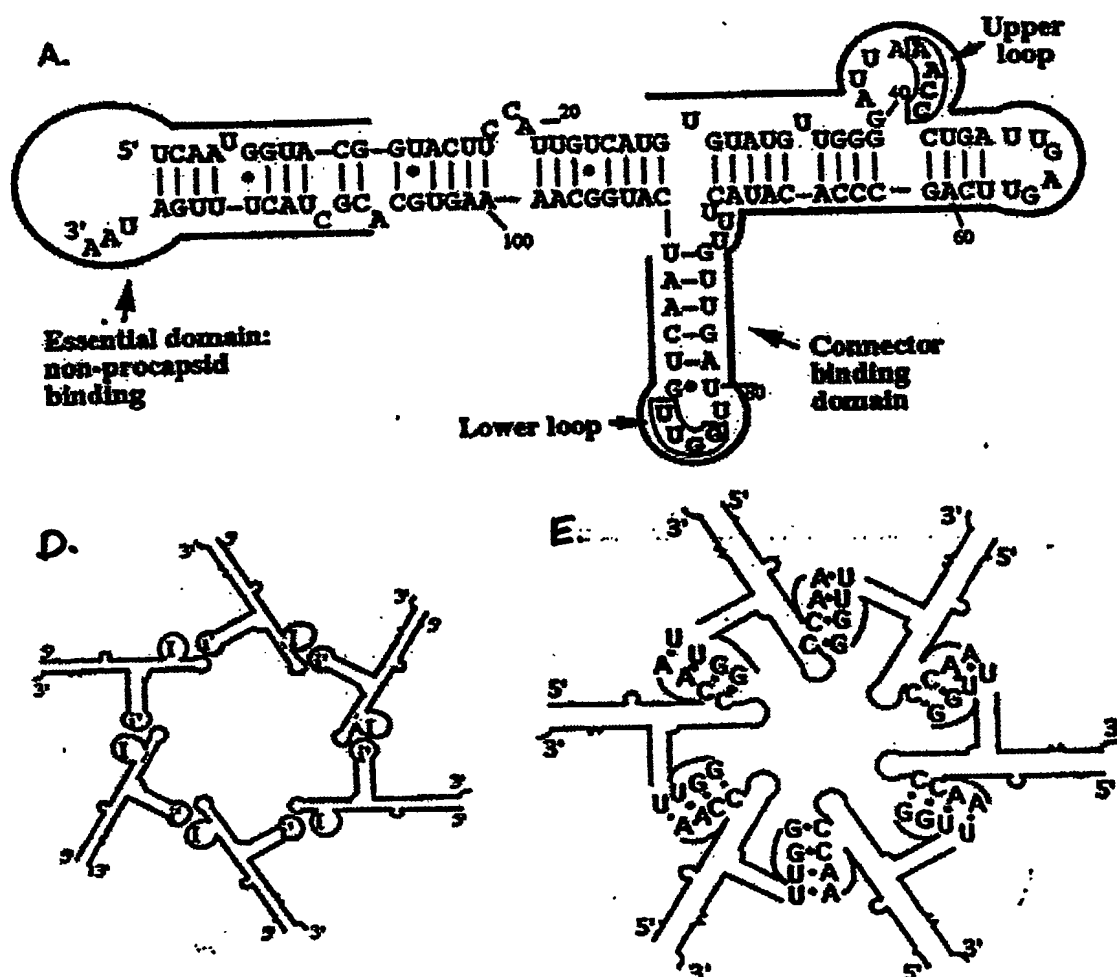
**Fig. 5(b)**

**Fig. 6(a)**

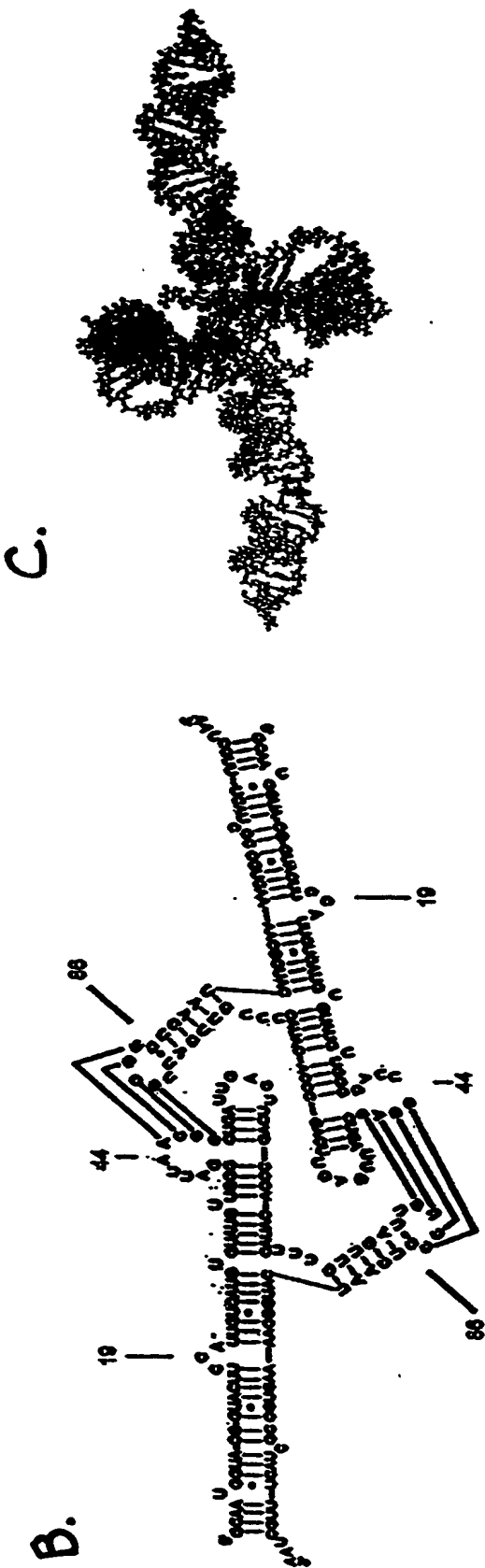




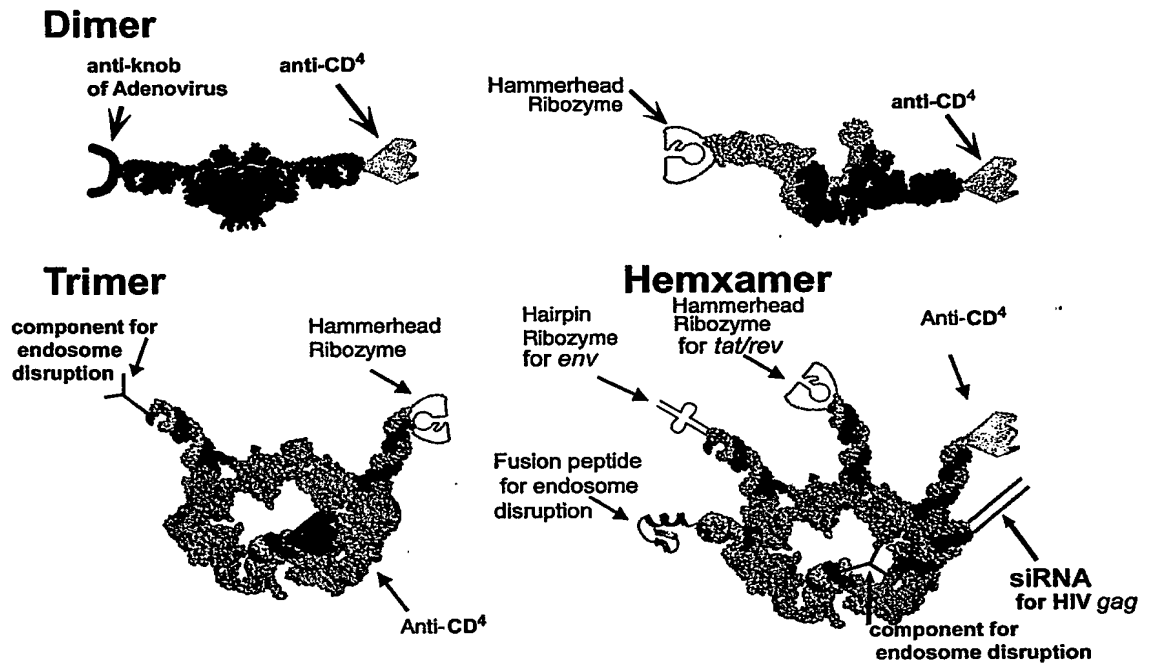
**Fig. 6(b)**



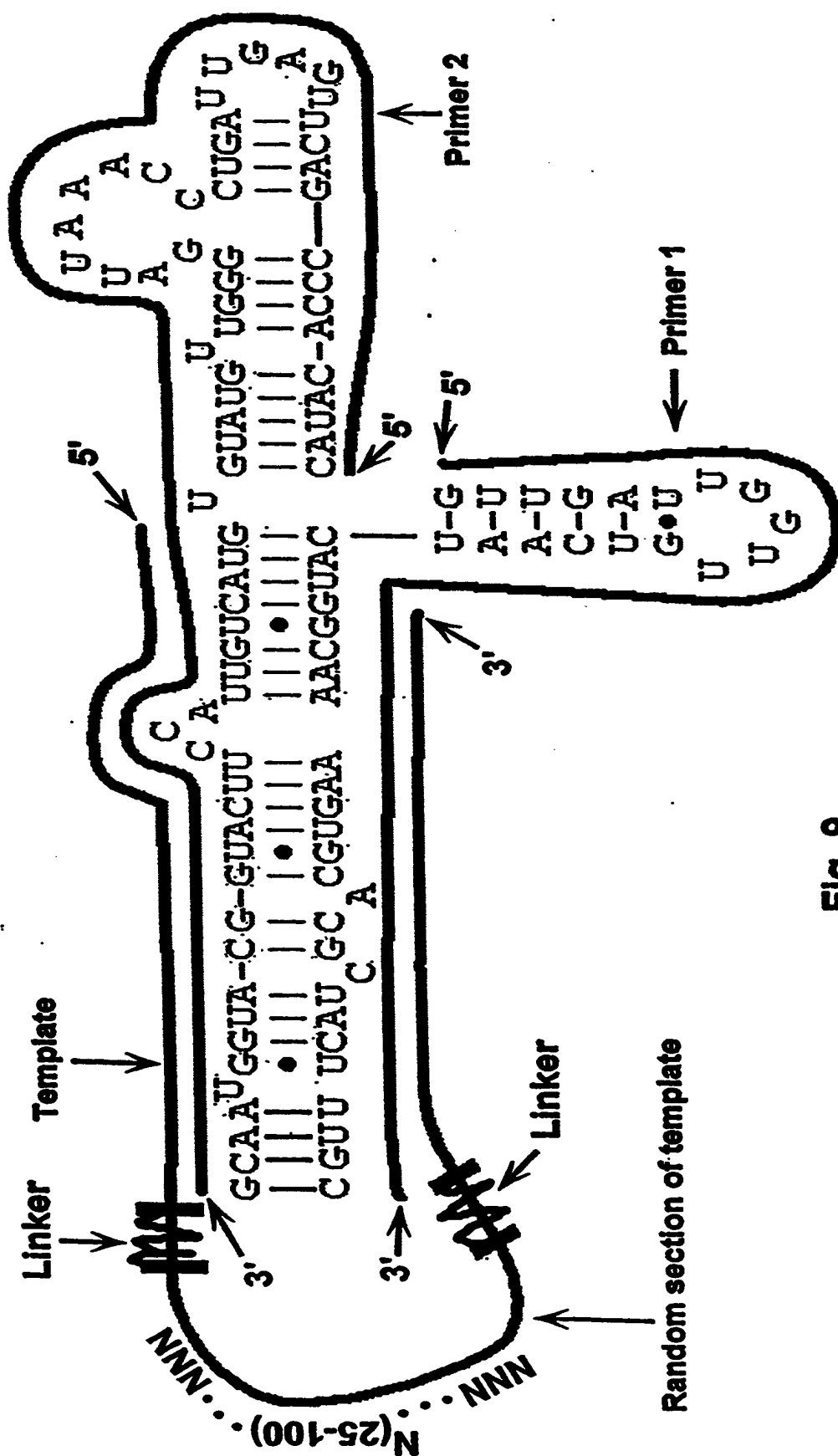
**Fig. 7**



**Fig. 7**



**Fig. 8**



உருத்


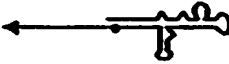
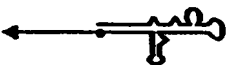
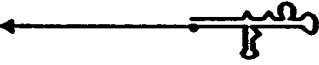
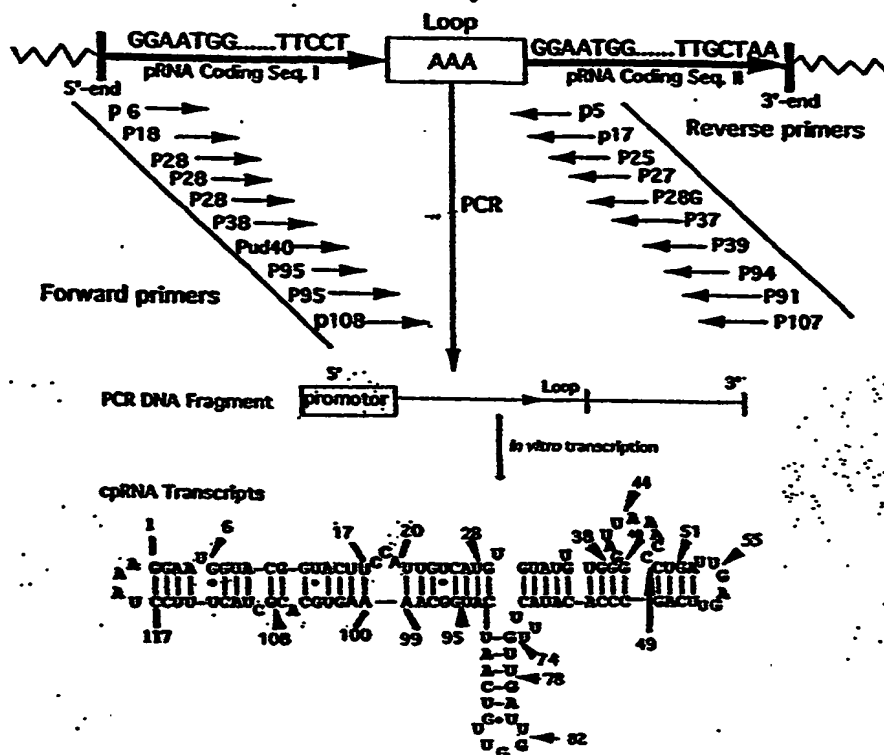
Name of RNA	Activity	Sequence of 3' overhang	3' overhang base number	Structure
Eco-pRNA	$10^8$	AA GCC GAA UU (SEQ ID NO:19)	10 bases	 3' overhang 10 bases
XbHi-pRNA	$10^8$	AAGCCGAAUUC AGCACACUGGCG GCCGUUACUAGU GGAUCCGAGCUC GGUACCAAGCU (SEQ ID NO:20)	59 bases	 3' overhang 59 bases
174-pRNA	$10^8$	CCUUUACAUGC GACACAGACGAA GCGCUAAAACGU GGGAUUCUGUG UCGUUUU (SEQ ID NO:21)	54 bases	 3' overhang 50 bases
DI-RNA	$10^8$	UCAAUGGUACGG UACUCCAUUGU CAUGUGUAUGUU GGGGAUUAACC CUGAUUGAGUUC AGCCCACAUACU UUGUUGAUUGGU UGUCAUCAUGG CAAAAGUGCACG CUACUUUGAUAA (SEQ ID NO:22)	120 bases	 3' overhang 120 bases

Fig. 10

## a. Small loop inserted



## b. Large loop inserted

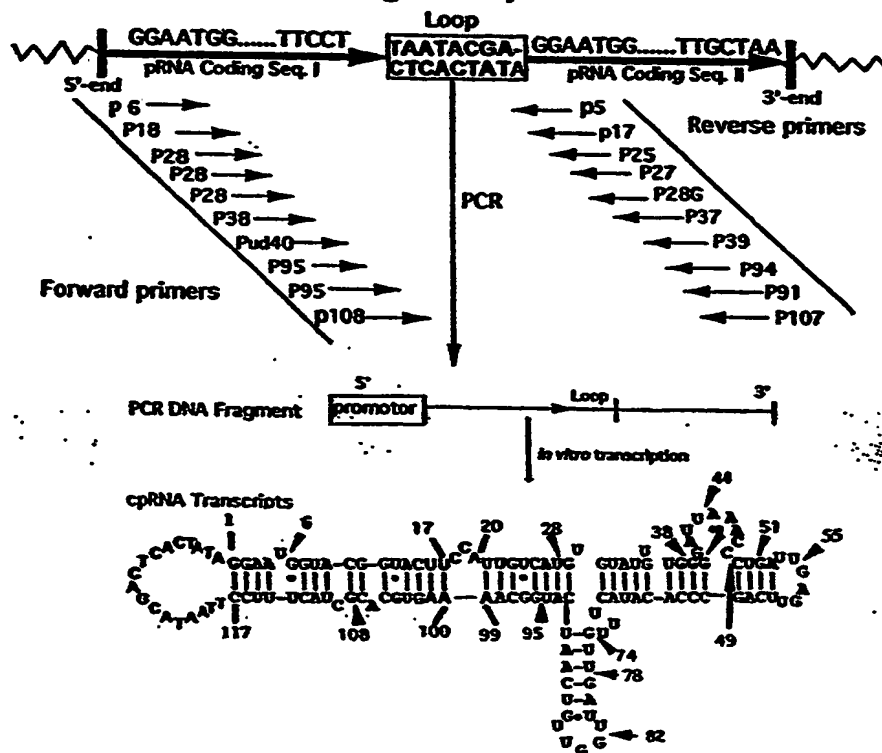


Fig. 11





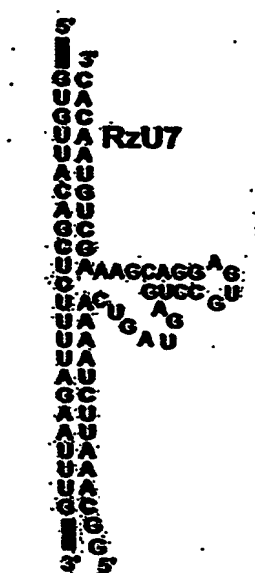


Fig. 13(a)

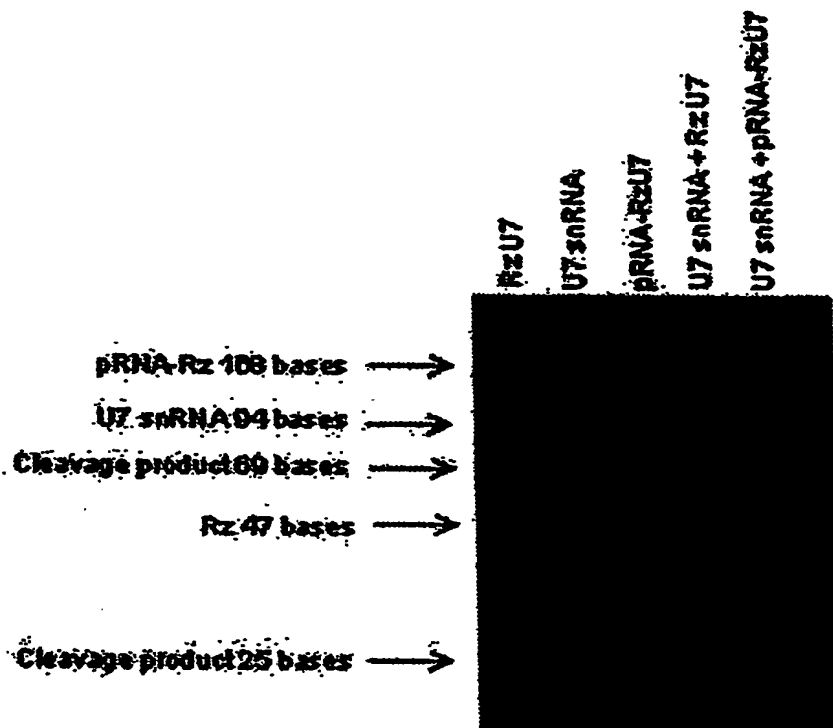
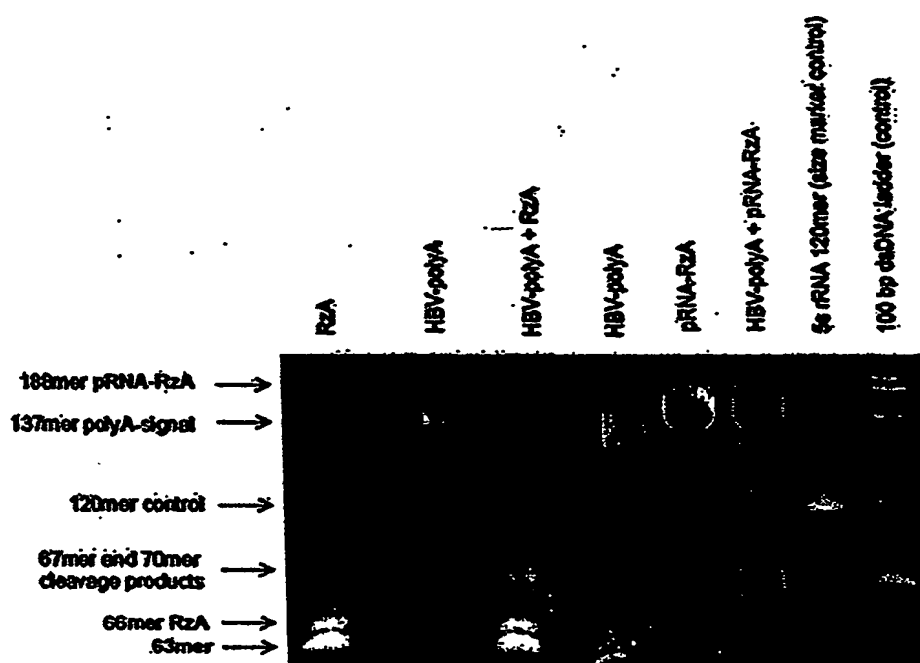
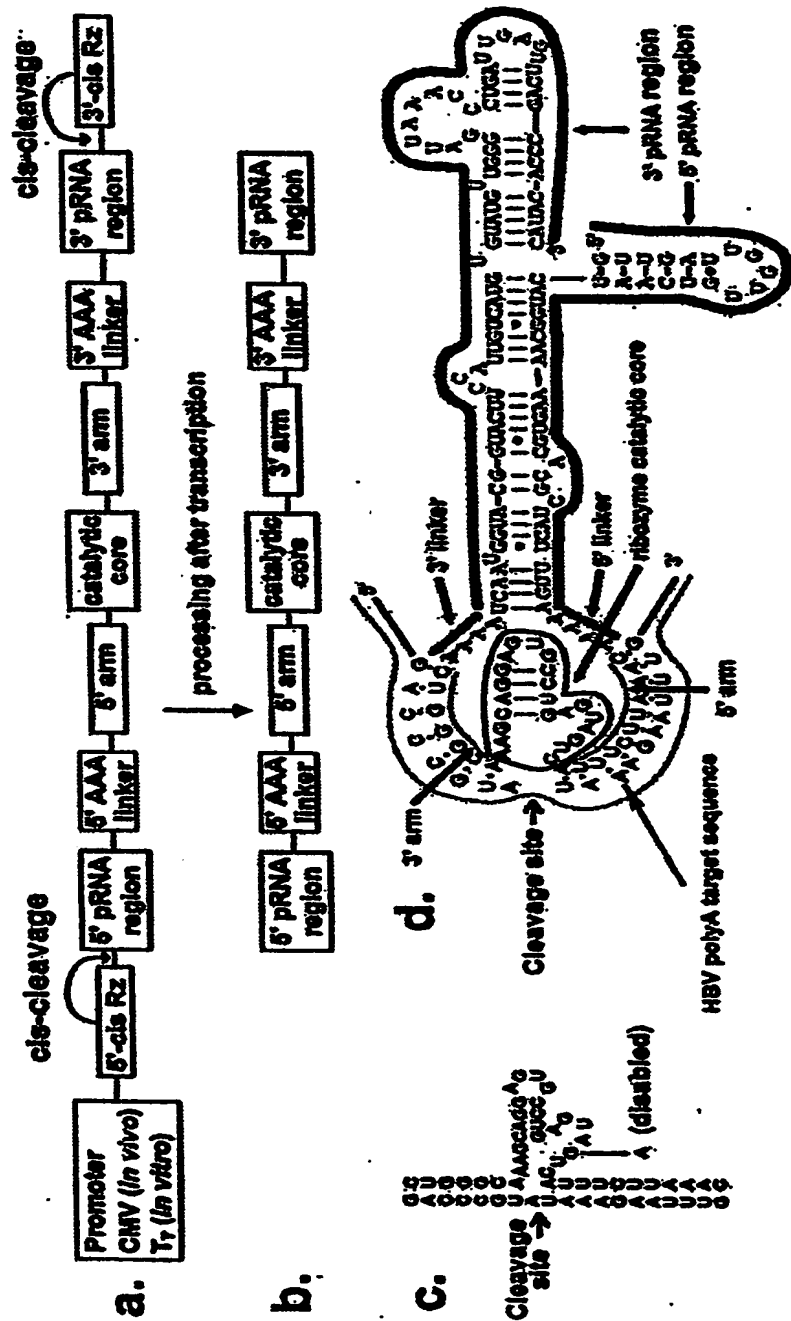


Fig. 13(b)

**Fig. 14**



**Fig. 15**

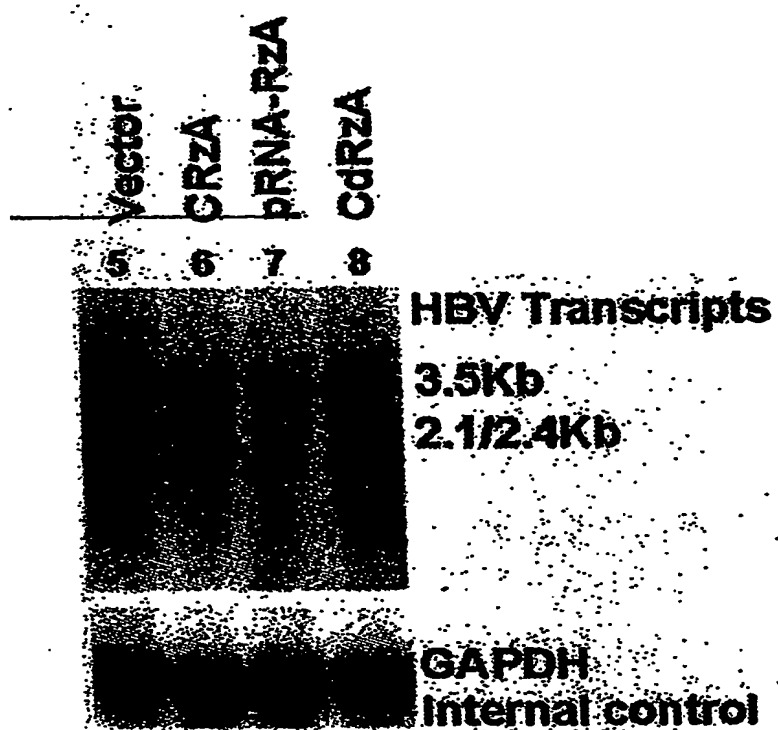


Fig. 16

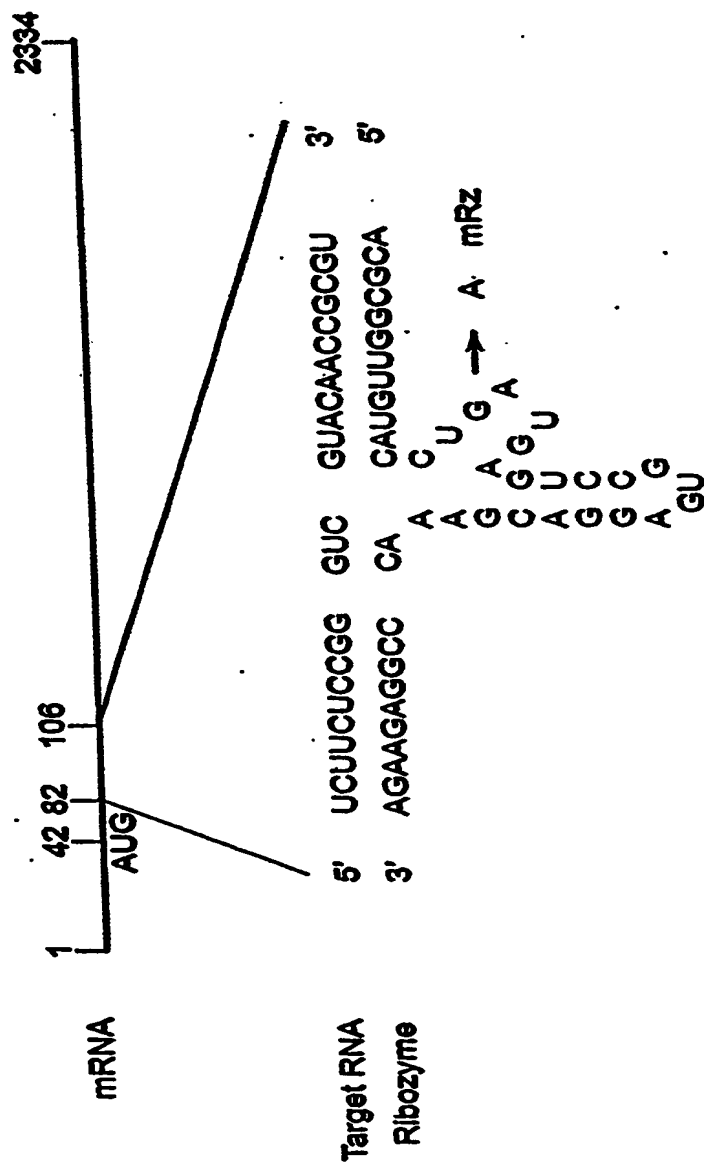


Fig. 17

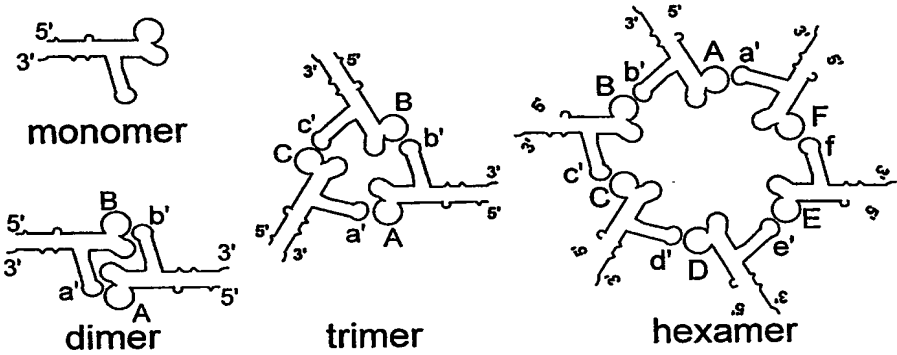
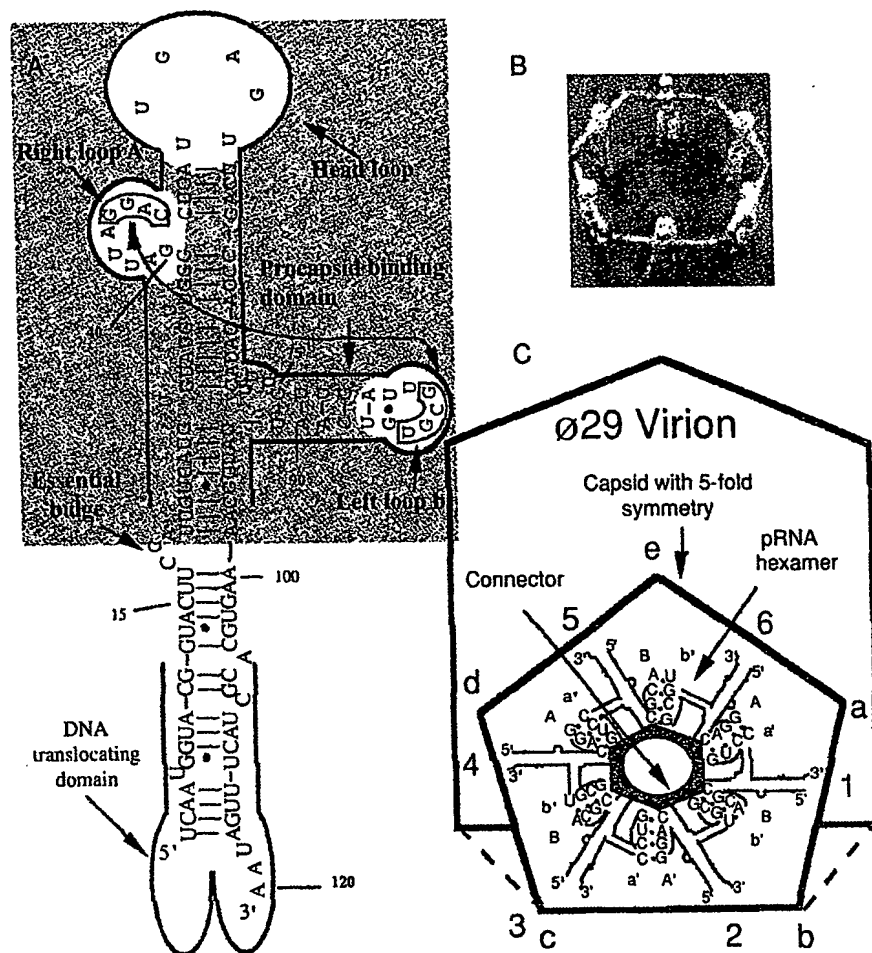
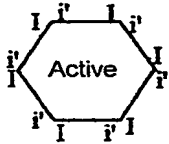
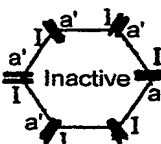
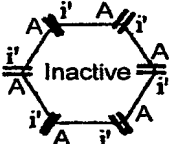
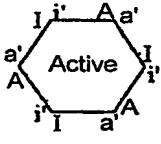


Fig. 18


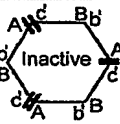
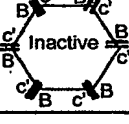
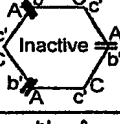
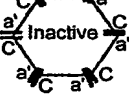
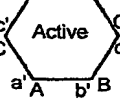
**Fig. 19**



**Table A Two Interlocking pRNAs**

pRNAs	Predicted Hexamer	pRNAs	Predicted Hexamer
I-i' (wild type pRNA)		I-a' (unpaired loop)	
A-i' (Unpaired loop)		(I-a') + (A-i') (Compensatory pair)	

**Table B Three Interlocking pRNAs**

pRNAs	Predicted Hexamer	pRNAs	Predicted Hexamer
A-b' (Unpaired loop)		(A-b') + (B-c') (miss one link)	
B-c' (Unpaired loop)		(A-c') + (C-b') (miss one link)	
C-a' (Unpaired loop)		(A-b') + (B-c') + (C-a') (compensatory trimer)	

**Table C Six Interlocking pRNAs**

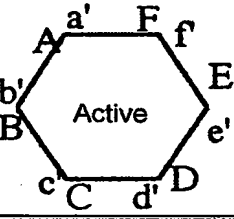
pRNAs	Predicted Hexamer
(A-b')+(B-c')+(C-d')+(D-e')+(E-f')+(F-a')	

Fig. 20

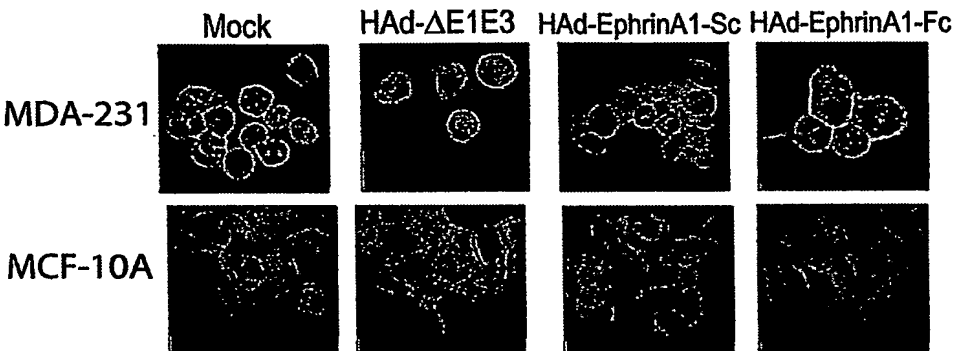


Fig. 21

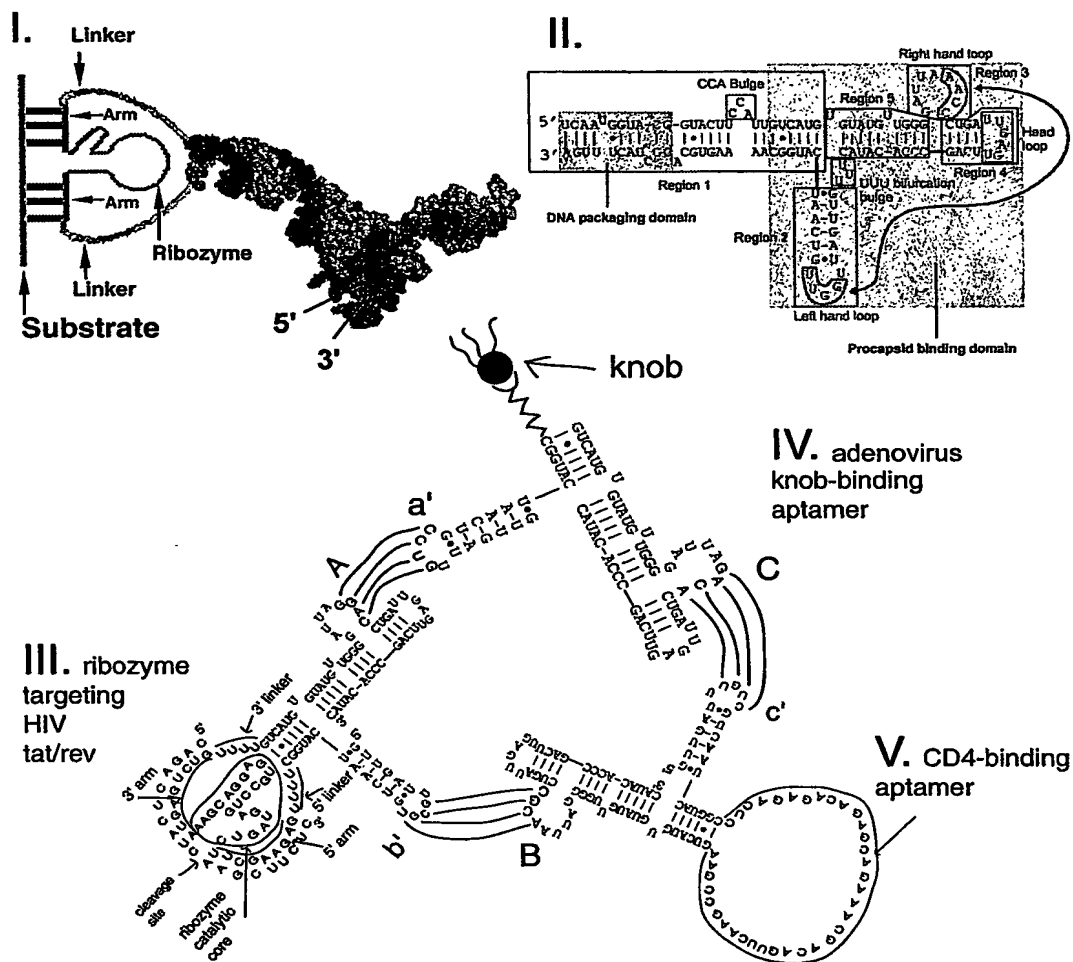
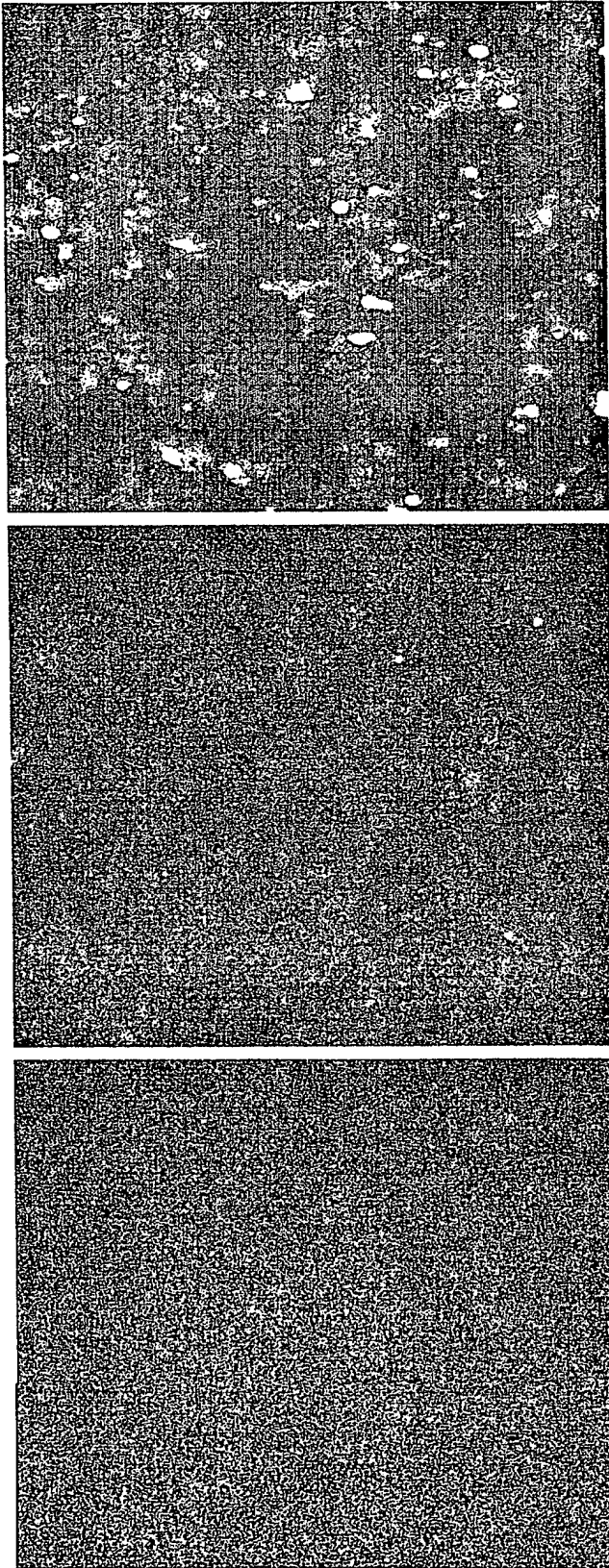


Fig. 22

Silencing of GFP Gene by siRNA



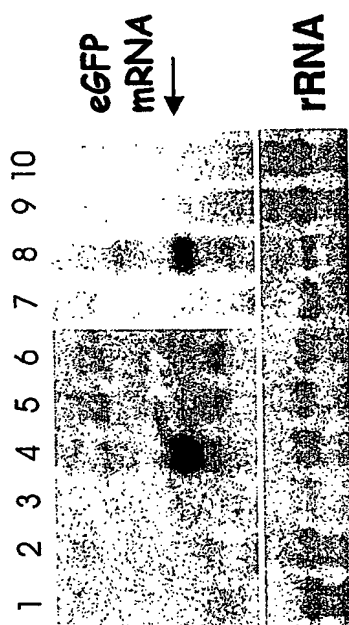
No siRNA

21-bp siRNA

Non-targeting siRNA

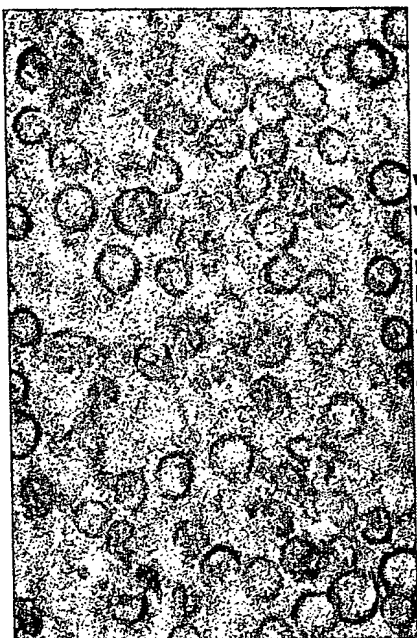
Fig. 23a

Fig. 23b



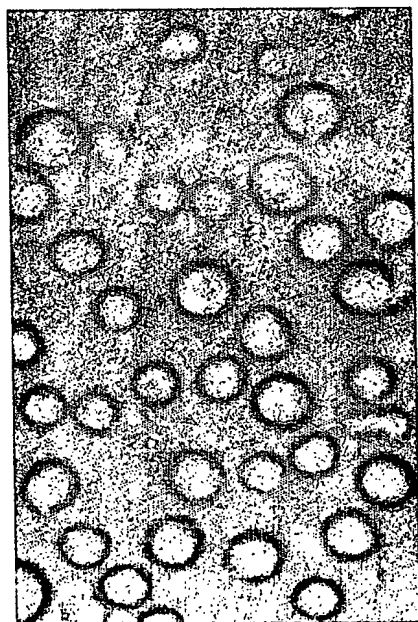
FL5.12A +IL-3

Survivin Ribozyme



53% Viable

GAPDH siRNA



98% Viable

Fig.24